

Friends of Dragon Run P. O. Box 882 Gloucester, VA 23061 Volume XLII Issue 1 March 2024



#### **From the President** *Jeff Wright*

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#### **Spring Paddle Season 2024**

By Jim Ewan and Carol Kauffman, Paddle Masters
Registration for the spring paddle season opens on
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are on a first-come-first served basis. The spring
paddle season will run from Saturday, April 13 to
Wednesday, May 22. Read more



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Unwanted Flora and Fauna Are Invading Our Ecosystems By Maeve Coker, Citizen Science Chair Invasive species outcompete native species in a variety of ways. Invasive species reduce biodiversity and have negative compounding effects on food chains and ecological relationships. Twenty-eight invasive plant species, ranging in severity, have been documented as occurring in the Dragon Run Watershed, many of them on FODR lands. Read More

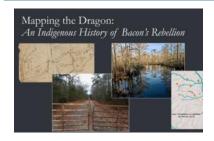


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#### **Stewardship Update.** By Jeff Wright, President

FODR is off to a good start for the new year. So far, we've focused our work on the beautiful Powcan property. Powcan, located in Essex County near the headwaters of the Dragon Swamp, is now ready to accommodate FODR activities such as member nature walks and youth outreach events. **Read More** 



#### Mapping the Dragon: Towards an Indigenous History of Bacon's Rebellion By Jeff Wright, President

FODR's work continues as part of a team researching the indigenous history of Bacon's Rebellion. National Park Services (NSA) American Battlefield Protection Programs promote stewardship of battlefields and sites of armed conflict on American soil. Yes, Dragon Swamp was a battlefield in 1676. **Read more** 

#### **Trash Pickup**

#### By Jeff Wright, President and Mark Alling, Trash Wrangler

In the first trash pick-up of 2024, six FODR volunteers picked up recyclable glass, metal and plastic containers, tires, and trash at Bestland, Cheaneys, Timber Branch Swamp, and Byrds Bridges during January. Combined, the items weighed more than one ton (2,080 lbs.). This pickup was part of a new plan to expand the number of pickup points from three locations to 15 locations at 15 bridges throughout the Dragon Run Watershed. **Read more** 



#### Friends of Dragon Run Super Sunday Nature Walk By Steve and Robin Mathews, Hike Masters

For the second time, the member/guest nature walk at Powcan was cancelled due to heavy rain in the area.

Our next member/guest nature walk, *Welcome Spring,* is scheduled for March 24 at 1:00 p.m. We'll tell you more as we get closer to the date but add it to your calendar now, so you won't miss it! **Read more** 



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#### **Continuing the Dream.** By Molly Broderson, Youth Outreach Committee Chair

Committee members are thrilled with the financial support DREAM received from *Giving Tuesday*. Each member enjoys helping the teachers and students, but we also appreciate the financial support from all who contributed to Giving Tuesday. Thank you!

Read more



#### **CitSci Update** By Maeve Coker, Citizen Science Committee Chair

The Citizen Science Committee was unencumbered by the onset of winter and subsequent dreary weather. The team is continuing efforts to document species found in the watershed. To date, we have tallied 1,066 species, an impressive number considering that we are adding to our inventory even in the winter. **Read more** 



#### **Streamside Attractions** Winter Wonders to Look For—You'll Like 'em *By Kevin Howe, Treasurer*

I love winter because I can really see the lichens with their various shades of green and their various growth structures. They come in a dazzling array of shapes, textures, and colors. **Read more** 

#### **FODR Membership Update**

By Carol Kauffman, Membership Chair

As a FODR member you have an active role in preserving this pristine and fragile ecosystem. You protect ancient bald cypress trees, threatened species of birds and plants such as Prothonotary Warblers and feather foil, and hundreds of other species of flora and fauna. As a member, you are critical to FODR's success.

**Read more** 



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**Standing Committees, Working Groups, and Appointees.** FODR does more than just take guests in kayaks into Dragon Run. This list of committees, working groups, and appointees shows what it takes to fulfill our mission to preserve, protect, and encourage wise use of Dragon Run. Read more

**Join the Action; Become a FODR Volunteer** By Carol Kauffman, Vice President

There are many ways volunteers can participate in fulfilling FODR's mission. We need volunteers to help with logistics, as property monitors, and to handle merchandise sales. Want even more responsibility? We could use a coordinator for our merchandise, an assistant to handle mailings (email), and a grant application writer. **Read more** 

**You're Invited . .**\_FODR members are invited to submit articles and photographs pertaining to Dragon Run. Share your knowledge about and your experiences on the Dragon. **Read more** 

**Activities Calendar Read more** 

**Board of Directors for 2024 Read more** 





Friends of Dragon Run
P. O. Box 882
Gloucester, VA. 23061
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#### From the President, Jeff Wright

This is the Year of the Dragon. But to all of us *FODRites*, every year is the Year of Dragon Run. Together we relish the challenges, responsibilities, and rewards from pursuing our mission to preserve, protect, and encourage wise use of the Dragon Run Watershed. As we fulfill our mission, we have great comradery and fun. Membership and involvement are growing

In 2024, we want more folks to experience our nature walks, paddles, and events. Building on 2023, we plan to grow our citizen science, stewardship, and outreach work and events, especially youth outreach. These activities have attracted so many of our members and have a key and measurable impact. Another goal for 2024 is to have more than 100 FODR members actively participate in field activities in support of our mission and outreach. I hope you will join us in 2024.



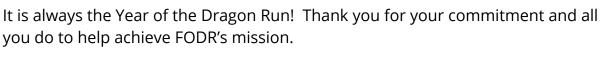
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#### A few key initiatives:

- Expand our involvement in Dragon Run watershed to areas other than the ones where we conduct paddle trips
- Further environmental literacy in our communities
- Grow our property monitoring, citizen science, and stewardship teams
- Reach out to communities, adults, families and youth, and schools (including home schoolers).
- Host member events and activities focused on families
- Continue citizen science events and species counts throughout the Dragon
- Work with communities and neighbors to minimize the spread of invasive species on land and water and keep Dragon Run clean and pristine
- Work at both ends of Dragon Run near the headwaters in Essex County and where Dragon Run and the Piankatank River meet below Route 17

To support our mission, we will add another dimension to our donor relations. We are establishing a Legacy Program for donors who want to make a lasting commitment to protect Dragon Run for generations to come.

you do to help achieve FODR's mission.







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#### **Spring Paddle Season 2024**

By Jim Ewan and Carol Kauffman, Paddle Masters

FODR conducts guided paddle trips in the Dragon during the spring, summer, and fall. These trips provide a revenue source used to protect the Dragon Run Watershed. They are our best method for sharing this unique ecosystem with the public. With more than 700 paddlers in 2023, we trust we are encouraging more people to advocate for the long-term conservation of Dragon Run. We look forward to hosting new paddlers in 2024 and inspiring new advocates for conservation of this special place.

FODR guided paddles are successful thanks to our exceptional team of volunteers. In 2023, more than 40 volunteers gave their time to ensure that paddle trips were informative, entertaining, and safe.



The 2024 volunteer questionnaire was sent to potential spring paddle and logistics crew members in February. Training for the spring paddle and logistics crew will be held April 7, 8, and 9.

During training, crew members are expected to demonstrate their paddling skills, and show that they can exit and re-enter their kayak at beaver dams,

pull dam gates, and assist paddlers through the gates downstream and upstream. A rescue scenario will be held, and crew members are expected to participate and



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provide feedback to the instructors and the group. Part of the rescue scenario will involve towing a disabled kayaker as well handling any emergency.

Registration for the spring paddle season opens on Saturday, March 9 at 9:00 a.m. As usual, reservations are on a first-come-first-served basis. The spring paddle



season will run from Saturday, April 13 to Wednesday, May 22. Wednesdays are reserved for groups.

The spring paddle season will be managed by Co-Paddle Masters Carol Kauffman. and Jim Ewan, both members of the FODR Board. Carol will handle guest reservations and Jim will handle crew scheduling.

FODR paddle trips fill up quickly and individuals who work during the week don't always have an opportunity to access paddle registration until after work when many of the best dates have been filled. To ensure that everyone has a fair chance



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at registering for the paddle day of their choice, we are moving paddle registration days to the second Saturday of the month.



Registration for spring will open at 9 a.m. on Saturday, March 9 (summer paddle season registration will open on June 8; and fall paddle season will open on Saturday, September 14 at 9:00 a.m.).

Looking ahead to the summer, the summer paddle season will run from Monday, July 15 to Sunday, July 28.



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#### Zion Branch Erosion Run-off Is Pouring into the Dragon

By Jeff Wright, President

FODR is working to help a landowner whose seven-acre pond along the Zion Branch near Saluda has been inundated with erosion from a solar energy facility upstream.

The pond is on a 30+ acre property bounding Dragon Run. The Zion Branch is carrying runoff erosion into the pond and back into Zion Branch and into Dragon Run. The source of the run-off is the Carvers Creek Solar Facility more than a half mile upstream from the pond.



Erosion sediment flowing into Dragon Run—dark area is water and light area is the sediment, like pouring milk into coffee.





Before and after pictures of the family's pond



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The problem, first identified in December 2023, has not been solved, and the erosion runoff continues to flow into the Dragon. Gloucester County has taken action to resolve the run-off issue. It issued a *Notice to Comply* to Carvers Creek Solar Facility. The facility and its contractors are working to control the erosion at the source.

But FODR's issue is not limited to stopping erosion at the source. Our issue includes restoration of Zion Branch and the pond and stopping the flow of erosion into Dragon Run. Accomplishing the restoration issues before spring rains is essential.

#### **Summary of findings and recommendations**

#### <u>Findings</u>

- 1) The key issue is erosion runoff and fine particles from the runoff downstream from the solar facility.
- 2) Erosion is still entering Dragon Run from the Zion Branch.
- 3) The lack of waterfowl and wildlife is of concern. This is probably the result of the broken food chains caused by the fine particles in the water.
- 4) Water flow rates appear to be down but the flow of erosion, in particular fine particles, continues.
- 5) Further steps are needed to resolve the amount of erosion runoff flowing into the pond and Dragon Run.

#### **Recommendations:**

- 1) As a cost-effective solution and *in conjunction with other initiatives underway*, FODR strongly recommends placement of two or more permeable baffles (or similar devices) to collect and slow fine particles in Zion Branch between the solar facility and Route 198. The erosion needs to be caught at the source.
- 2) Friends of Dragon Run will continue water quality testing, turbidity testing, and visual inspections.

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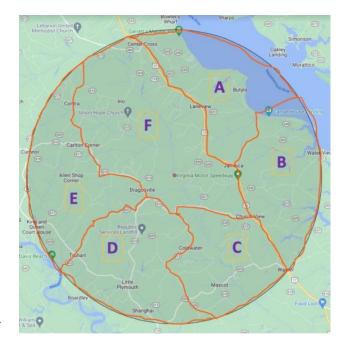


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#### Inaugural Dragon Run Christmas Bird Count a Success By Jeff Wright, President

The inaugural Dragon Run Christmas bird count was a success from a species count standpoint and a fun event for the participants. For a rain-shortened event, we did very well: 75 species and a total of 7,177 birds with 27 participants.

The count was conducted with in a 15-mile diameter circle centered near where the Timber Branch Swamp enters Dragon Run. The circle covered a wide range of habitats between the Rappahannock and Mattaponi Rivers and segments of Essex, King & Queen, and Middlesex counties. This same circle is also used for the annual Dragon Run butterfly count.



The top birds in terms of numbers were 2,135 Ring-billed Gulls, 828 Ruddy Ducks, 532 Red-Winged Blackbirds, 440 American Robins, and 434 European Starlings.

A special thank you to the sector leaders for the count: Robin Mathews, Sherry Rollins, Susan Crockett, Tom Crockett, Maeve Coker, Joey Coker, Mike Grose, Jeff Wright, Betsy Washington, and Kevin Howe.



The "Bird of the Count" was the Lesser Black-Backed Gull (shown on the left) sighted by Maeve Coker near the King and Queen Landfill. An unusual species for our neck of the woods (and landfill!). A rare bird report was filed with the overall count results.



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#### How did Tex and Judy Cathey become founding members of FODR?

Judy Cathey Interview with Jeff Wright



Judy and Tex Cathey

By the time Tex and I became founders of FODR, Jimmy Morgan had been working on his vision of preserving the Dragon for many years. We were new to the area and didn't know anything about the Dragon, but his passionate enthusiasm for the project was contagious and we were hooked. Little did we know that our original donation for the purchase of Big Island would reap so many benefits for the future of the land, water, and people of the community.

We also didn't realize that signing up with Jimmy wasn't just a donation and done. He needed the

time and talents of all the founders. We helped build and install wood duck boxes and picnic tables, plant bald cypress saplings, attend meetings and picnics and everything else needed at that time. We all followed Jimmy like children behind their Pied Piper and were happy to do so. He had a vision, and it was exciting to be part of that vision.

What was the greatest challenge in building the organization? We think that some of the greatest challenges facing FODR today are the same challenges it's been facing since its inception. Most local folks live their lives never knowing that the Dragon exists, much less knowing that it is the northernmost habitat for bald cypress in the country and that the Smithsonian Institution and The Nature Conservancy named it the "most pristine water body" in the Commonwealth of Virginia and the second most "ecologically significant area in the whole Chesapeake Bay." In 1974 when these statements were first published, I don't think that more than a handful of people in the Middle Peninsula knew, or even suspected that. Now, fifty years later, I bet most of the residents in the area still don't know that they have a hidden natural treasure in their own backyard. We believe that if more



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people know about the uniqueness and value of the Dragon and what FODR does, there would be stronger grass roots support for its preservation.

**Favorite memories of FODR:** We have many fond memories of the Dragon and our participation in FODR but here are just a couple of them.

After Jimmy Morgan died in 1997, the members of FODR decided they wanted to do something on the Dragon to memorialize him. Eventually they decided to place an engraved memorial stone on Big Island commemorating Jimmy. That decision led to a whole list of practical problems. Where do you find a 250-pound river stone in Tidewater, Virginia and how do you get it engraved? Another big task became how to get the stone from the Big Island parking area across the Dragon to its final resting place on Big Island. Lastly, we wanted Jimmy's mother who was in her 80s or 90s and wheelchair bound to be able to attend the service. How could we get

her across the water?

Tex took the project on with gusto. He found the perfect water worn stone in the Watauga River near Banner Elk, NC. We loaded it in the truck and brought it home. Next, he had it engraved by a local funeral home. Lastly, he and Davis Rhoads and a few other Board members built a contraption that had four long handles that held the stone and



rested on the gunwales of two canoes and paddled the stone across the Dragon. Another crew built a temporary bridge across the Dragon so Jimmy's mother could attend the service. As I remember it, there was quite a turn out for the service and not more than a few dry eyes that day. Jimmy would have enjoyed it all.

The second account that I would like to include didn't have anything to do with FODR but is still a great Dragon story. My mother and her siblings grew up in Middlesex County in the 1920s and 30s hearing all kinds of scary stories about the



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Dragon. They were told that it was dangerous and no place for children. It was full of snakes and runaway enslaved people and native Americans living off the land and hiding from the local population. Once we became members of FODR, my Mom and Aunt Mary started hearing about a very different sort of Dragon and they were intrigued and wanted to see it for themselves. We were more than happy to lead then on an expedition.

A date was set, and plans were made. However, Mother Nature intervened and about three weeks before our launch date we had a hurricane and the Dragon rose over its banks. Tex and I ran reconnaissance about a week before to make sure the water level had fallen to a safe level. It had and we had a beautiful, sunny day of paddling and exploring. Tex paddled with Aunt Mary, and I went with Mom. They were mesmerized. At one point Aunt Mary reached up about four feet above the water line and grabbed a small bald cypress branch with the dead brown needles still attached. She turned to show us what she'd found and said, "Look, it's dragon fur!" And indeed, that little bit of dried cypress needles did look like dragon fur. We laughed about that for many years.

How to protect the Dragon? We're not scientists, educators, policy makers, or government power brokers. Without an area of specialty, it's difficult to have well thought out answers to the question of how best to continue to protect the Dragon other than to continue working with other agencies, organizations, state and local government authorities and anyone else with a place at the table. We all know what the end goal is. Control the watershed so that what goes into the Dragon can be controlled. Anyone who has spent much time on the Dragon or roamed its swamps and woodlands has felt the majesty of the big bald cypresses, especially in their bronze fall finery, or anyone who has spent time watching a dragonfly or damselfly land on their kayak or canoe or shoulder and stay there for what feels like forever, or seen the yellow water lily blooms or noticed the clear water stained by tannic acid knows that these experiences are valuable. Valuable for all of us now and even more valuable in the future when the wild places become fewer and farther in between.



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## Unwanted Flora and Fauna Are Invading Our Ecosystems

By Maeve Coker, Citizen Science Chair

What is an invasive species? An invasive species is one that is not native to the area and outcompetes native species. Invasive species can range anywhere from plants to insects, and even mammals. They have entered the landscape in a variety of ways. Some, like the tree of heaven (Ailanthus *altissima*), were introduced intentionally to control erosion or curb pollution. Others, like the nonnative bush-clovers, *Lespedeza cuneata* and Lespedeza bicolor, were introduced as wildlife food. Overwhelmingly though, the majority of and some of our worst invasive species are those that have escaped the horticultural industry. Plants like Chinese privet (Ligustrum sinense), Chinese wisteria (Wisteria sinensis), and yellow flag iris (Iris pseudacorus) are devastating to ecosystems.

What is the real problem with invasive species? The easiest way to explain this is that they outcompete native species in a variety of ways. Invasive species reduce biodiversity and have negative compounding effects on food chains and ecological relationships. Many of our non-native vines



Chinese wisteria. Photo by Maeve Coker



Yellow flag iris. Photo by Maeve Coker

smother and kill native trees because our trees haven't coevolved with them. They girdle the trees, tightly encircling them as they climb to the canopy, cutting off the flow of nutrients.



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Chinese privet. Photo by Anne Parker

Chinese privet is a great example of a species that completely alters the understory of forests. It totally blocks sunlight from the forest floor year-round, inhibiting germination of species, while simultaneously outcompeting our native trees and shrubs from reaching their potential. The recruitment of canopy trees when they die is never fulfilled, meaning that no young native trees will ever grow up to replace their role in the ecosystem. Rather, we are left with a complete forest understory layer of privet.

Some of our worst wetland invaders, like yellow flag iris, form dense colonies that completely choke out native vegetation. These colonies can accumulate excessive amounts sediment and change the

hydrology and flow of water in wetland ecosystems.

Twenty-eight invasive plant species, ranging in severity, have been documented as occurring in the Dragon Run Watershed, many of them on FODR lands. Some of these plants are just beginning to establish, while others have been in the region for quite some time and are having irreversible effects on ecosystems. It is vital that we eradicate invasive species when they are found to prevent the spread of these species to uninfected areas and to save the biodiversity that remains.

It is important to remember that the attitude of "It's not invasive in my backyard!" has irreparable consequences. Just because one can't see it directly, doesn't mean it isn't creating problems somewhere else. You could make the argument that you see birds eating the fruit and seeds of these invasive species, or pollinators swarming the flowers, and therefore think they must offer some benefit. The counterargument is that our native species have not evolved to derive the full nutrient benefits provided by nonnatives, which essentially is equivalent to a human eating nothing but potato chips



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for every meal. Because this is FODR's first year documenting invasives, we are still in the early stages of evaluating and eradicating. The Citizen Science Committee will continue to monitor and map the widespread damage of invasive species, as well as look to the scientific literature for guidance on control measures.



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#### **Stewardship Update**

By Jeff Wright, President

FODR is off to a good start for the new year. Teams began clearing downed trees at the Revere and Wares Bridge properties in January. But we focused our work on the beautiful Powcan property. Work teams improved trails, especially trails going through wetlands or crossing seasonal streams. Foot bridges, puncheons, and *cookies\** were installed to facilitate hiking the amazing property and enhancing safety.

Powcan, located in Essex County near the headwaters of the Dragon Swamp, is now ready to accommodate FODR activities such as member nature walks. The property pictured on the right has an exceptional pond known for its beavers and the birds that rely on it.

Thank you to Andrea Mitman for leading 11 volunteers during the stewardship event on January 18th at



The beaver pond at Powcan

Powcan. Also, thanks to Jack Kauffman for planning building and installing the bridges and puncheons at Powcan. Jack also led two workdays at the property. On November 14<sup>th</sup>, 12 volunteers helped build three bridges and a puncheon and on December 12<sup>th</sup>, 13 volunteers added another bridge and three puncheons.

Stewardship in February focused on maintenance at the Big Island Complex of properties including Big Island, Revere, Williams, and Bulman. We worked on maintaining the trails, roads, parking areas, launch areas, and boundary markings. The focus of these workdays was to get ready for our spring paddles, citizen science events, and most importantly, to get ready for our members to experience spring



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arriving on the Dragon. We did this work during the winter before the greenbrier and ticks come out to play. Information on upcoming FODR stewardship days and sign up can be found on the FODR website.

\* What's a cookie, you ask. Cookies are made by horizontally slicing a tree trunk to make slabs or cookies.



These cookies can be used for steppingstones in marshy areas.



Back



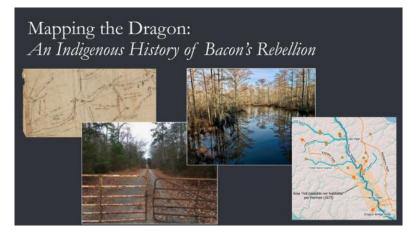
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#### Mapping the Dragon: Towards an Indigenous History of Bacon's Rebellion

By Jeff Wright, President

FODR's work as part of a team awarded a National Park Service Grant continues. The project is entitled: Mapping the Dragon: Towards an Indigenous History of Bacon's Rebellion.

Preservation planning grants are the National Park Services (NSA) American Battlefield Protection Program's



A slide from the February 3 work session to discuss research and analysis to date.

broadest and most inclusive grant program. They promote stewardship of battlefields and sites of armed conflict on American soil. Yes, Dragon Swamp was a battlefield in 1676.

Our team is headed by Dr. Julia King of St. Mary's College in Maryland and includes the Pamunkey Tribe, the Rappahannock Tribe, and the Friends of Dragon Run. FODR is involved in studying and exploring how the tribes operated within the Dragon, lived off the land, hid in the swamp, and employed strategies, tactics, techniques, and procedures that prevailed in what was a significant battle in America's history. This historic battle has always been told from the colonists' point of view. This grant is to learn and understand the complete story.

#### From the Grant Award announcement:

As Bacon assembled his troops at the head of the Pamunkey River, indigenous communities, numbering perhaps as many as 700 people and led by Cockacoeske, withdrew into Dragon Swamp, a landscape of meandering



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blackwater streams impenetrable to outsiders. Bacon and his forces, unable to find the Native camps, managed to capture Cockacoeske's nurse and demand that she lead them to the weroansqua. For several days, the nurse led the rebels away from Cockacoeske until Bacon's men realized what was happening and killed her. The Natives followed centuries-old paths into the Dragon where, after dispersing, they established and moved camp as Bacon's forces drew closer. These tactics served to evade, confuse, and delay Bacon's unprovoked attacks and to minimize the casualties and losses Native people suffered. The English rebellion dissolved after Bacon's death that October; Virginia's indigenous communities endured..."



On February 3, Dr. Julia King, Dr. Megan Postemski, both from the St. Mary's College Team, and Jeff Wright from FODR met with members of the Pamunkey Tribe at the tribal center in King William County. The working session was to discuss field research and analysis to date. Participants asked hard and probing questions

and offered insights about the research, research sources, bias in histories and journals, probable environmental aspects of the Dragon in the fall of 1676, tactics used by the warriors, tribal leadership and decision making, and inter and intra tribe communications. The questions and comments were on point and will help the team refine the report, research methodologies, and narrow the search areas within the Dragon Run Watershed.

Afterwards, many of the participants expressed their gratitude for the research. In addition to telling the story of Bacon's Rebellion from the indigenous peoples' point of view, the report will establish a clear connection between the tribes and the Dragon Watershed.



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At the end of 2024 when the team's research is completed and the report is being prepared for the National Park Service, the team will present the findings and impetus to further study the battle that occurred here.

Bacon lived only to age 29 but he clearly left a mark, and not a good mark, on the history of our region. FODR is proud to be part of the team *Mapping the Dragon: Towards an Indigenous History of Bacon's Rebellion.* 



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#### **Trash Pickup**

By Jeff Wright, President and Mark Alling, Trash Wrangler

In the first trash pick-up of 2024, six FODR volunteers picked up recyclable glass, metal and plastic containers, tires, and trash at Bestland, Cheaneys, Timber Branch Swamp, and Byrds Bridges during January. Combined, the items weighed more than one ton (2,080 lbs.). Recyclables totaled at least 1,460 lbs., and trash totaled less than 620 lbs. Notable finds included two deer carcasses; 719 recyclable glass and plastic bottles and metal cans; and 47 tires. The Ocean Conservancy's *Clean Swell* protocols were used to collect data on the material and the amounts collected.

But where the heck are the Bestland, Cheaneys, Timber Branch Swamp, and Byrds Bridges? These bridges are in the upper areas of the Dragon Run Watershed.

This pick-up is part of FODR's restructured and more aggressive trash pick-up program around bridges throughout the watershed. We have applied to add Essex and King and Queen Counties to FODR's participation in Virginia's VDOT-managed *Adopt a Highway Program*.

Our new trash pick-up plan includes pick-ups at new sites and a team-focused approach. Under the new plan, volunteers will go directly to the pick-up sites instead of everyone meeting at a central site and then going to the assigned pickup sites. Recycling will focus on the capacity and limitations of different landfills. We will continue to use the *Clean Swell* protocol and the *Adopt a Highway* procedures. In addition to helping keep the Dragon "clean and pristine," the new plan gives FODR volunteers a chance to visit some exceptional areas of the Dragon Run Watershed.

Of course, we hope to get Meryl Streep and Clint Eastwood to shoot a sequel to the "Bridges of Madison County." Although not finalized, the title will be "Cleaning the Bridges of Dragon Run.

Want to join the fun? Contact <a href="mailto:PresidentDragonRun@gmail.com">PresidentDragonRun@gmail.com</a>. Information about each month's trash pickup and sign up will be posted on DragonRun.org.



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#### **Trash Pickup Schedule**

Date	Location		Date	Location
Mar 14	Dragon Run, Rt 612 Br., 1 mi N of Rt 617.		August 14	Dragon Run, Rt 612 Br., 1 mi N of Rt 617.
	Dragon Run, Rt 607, Jones Br. at Prince.			Dragon Run, Rt 607, Jones Br. at Prince.
April 11	Dragon Run, Ware's Br., Rt 602 Br.		September 19	Dragon Run, Rt 17 Bridge.
	Dragon Run, Byrd's Br., Rt 604 Br.			Dragon Run, Teta Cain Pk, Rt 603 Br.
				Dragon Run, Ware's Br., Rt 602 Br.
				Dragon Run, Byrd's Br., Rt 604 Br.
May 29	Exol Swamp, Rt 607 Br.		October 9	Exol Swamp, Rt 607 Br.
	Exol Swamp, Rt 612 Br.			Exol Swamp, Rt 612 Br.
	Exol Swamp, Rt 617 Br.			Exol Swamp, Rt 617 Br.
June 20	Exol Swamp, Rt 615 Br., 0.5 mi N of Rt 610.	-	November 14	Dragon Run, Rt 17 Bridges.
	Exol Swamp, Rt 614 Br.,1 mi above mouth.			Dragon Run, Teta Kain Nature Preserve,
	Timber Branch Swamp, Rt			Rt 603 Br.
	610 Br @ Rt 614			Dragon Run, Ware's Br., Rt 602 Br.
				Dragon Run, Byrd's Br., Rt 604 Br.



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July 10	Dragon Run, Bestland Br., Rt 612 Br.	D 12	ecember 2	Exol Sw., Rt 615 Br., 0.5 mi N of Rt 610.
	Dragon Run, Cheaneys Br., Rt 607 Br.			Exol Sw., Rt 614 Br., 1 mi above mouth.
				Timber Branch Sw., Rt 610 Br @ Rt 614

#### **Trash Pickup Locations**

Nick Name	County (s)	Route	Parking	Trash: January	Frequency Per Year	Clean Swell
Bestland	Essex	612, 1 Mile S. of Howerton	Good	High	Four Times	Yes
Cheaneys	Essex	607, 1 Mile W. of Upright	Fair	High	Four Times	Yes
Lily Ponds	K&Q, Essex	612, 1 Mile N. of Rte 617	Fair	Average	Two Times	Yes
Prince	K&Q, Essex	607, near Prince	Fair	Average	Two Times	Yes
Powcan	K&Q, Essex	620 at Powcan	Poor	Average	TBD, Safety Review	Yes
Bryds Bridge	K&Q, Essex	604 at the Dragon Run	Fair	High	Four Times	Yes
Daisy	K&Q	607, near Daisy	Good	Low	Two Times	Yes
Exol 612	K&Q	612, 1 Mile N. of Rte 630	Good	Average	Two Times	Yes
Contra	K&Q	617 at Contra	Good	Low	Two Times	Yes
Exol 615	K&Q	615, .5 Miles N. Rte 610	Good	Average	Two Times	Yes
Exol 614	K&Q	1 Mile upstream from DR	Fair	Average	Two Times	Yes
Timber Branch	K&Q	610, .1 Mile N. Rte 614	Fair	Average	Four Times	Yes
Wares Bridge	K&Q, Middlesex	602 at the Dragon Run	Good	Average	Four Times	Yes
Mascot Bridge	K&Q, Middlesex	603 at the Dragon Run	Good	High	Four Times	Yes
Morgan Bridge	Middlesex, Gloucester	17 at the Dragon Run	Fair	High	Four Times	Yes



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### Friends of Dragon Run SUPER SUNDAY Member/Guest Winter Nature Walk

By Steve and Robin Mathews, Hike Masters

Tailgating is so yesterday. Who wants to get ready for the big game in the parking lot with a cooler full of . . . oh wait . . . that could be fun . . . But this was the deal . . .

On 2024 game day you would have had a chance to "pre-game" with fellow Friends of Dragon Run and explore the slumbering Dragon on land. By the time the kickoff rolled around you would have already burned off that first plate of nachos!

But, for the second time, the member/guest nature walk at Powcan was cancelled due to heavy rain in the area over the preceding two days.

So, how can we make it right?

Well, we have a *Welcome Spring* member/guest nature walk scheduled for March 24 at 1:00 p.m. We'll tell you more as we get closer to the date but add it to your calendar now, so you won't miss it!



Susan Crockett and Steve Mathews ready for a nature walk



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#### **Continuing the Dream**

By Molly Broderson, Youth Outreach Committee Chair

Members of the Youth Outreach Committee continue to mentor participants from the DREAM 2023 professional development. Committee members have kept in contact with the educators on an as needed basis.

Committee members are thrilled with the financial support DREAM received from *Giving Tuesday*. Each member enjoys helping the teachers and students, but we also appreciate the financial support from all who contributed to Giving Tuesday. Thank you!



The Committee is gearing up for DREAM 2024. We have already submitted a

proposal to the Chesapeake
Bay Restoration Fund
Advisory Committee and
received a \$3,000 award.

If you are not familiar with this fund, perhaps the

graphic on the right will help

explain it. Fees paid for this special license plate will be used to financially fund 56 applicants in 2024. We are grateful to receive their support!

Committee members are putting the finishing touches on a proposal to the Virginia Department of Conservation and Recreation 2024 – 2025 Virginia Watershed Educational Programs Project.

We expect to learn the outcome of our application by June 1, 2024.





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#### CitSci Update

By Maeve Coker, Citizen Science Committee Chair Photos by Maeve Coker

The Citizen Science Committee was unencumbered by the onset of winter and subsequent dreary weather. The team is continuing efforts to document species found in the watershed. To date, we have tallied 1,066 species, an impressive number considering that we are adding to our inventory even in the winter.



Short-leaf pine

Our last new species of 2023 was the short-leaf pine, *Pinus echinate*. The first new species of 2024 was purple three-awn grass, *Arisitida purpurascens*. They were found in King and Queen and Essex Counties, respectively. Interestingly, both upland species are indicators of grassland/savanna ecosystems.

The more time the Citizen Science Committee spends in our watershed, the more we find that historically, our watershed was not a continuous block of closed-canopy forest, but rather a matrix of different habitat types that included extensive grasslands and savannas. Many of the species found depend on regular fire disturbance to keep trees at bay. Some of these habitats have been found directly adjacent to the Dragon Run itself.



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American Woodcock

We began the year with our first Citizen Science event on January 27, hosted at an early succession property within the Big Island Complex. A Woodcock Walk was held for members to enjoy the epic courtship displays of the American Woodcock. We started

before dawn and ended a couple of hours later after a nearly three-mile hike. At the end of the event, seven Woodcocks were found and a total of 45 species were tallied!

We have upcoming events scheduled for March 16, April 20, and May 18. Focal areas and locations have not been determined yet, so make sure to stay up to date on our Facebook page and our website for announcements. We look forward to seeing you in the field this year!



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#### **Streamside Attractions**

Winter Wonders to Look For—You'll Like 'em By Kevin Howe, Treasurer All photos by Kevin Howe

Many folks say they love winter forest walks (me too). When I ask why, I get a variety of answers like "I don't see anyone else," "I love to see the landscape through the trees," or "The air is crisp, and nature seems to have hit the pause button." Of course, there is no single correct answer; any stroll in nature is good for body and soul—whether winter, spring, summer, or fall.

However, I have never heard anyone say, "I love winter because I can really see the lichens with their various shades of green and their various growth structures." But that's one of the reasons I love winter walks—the lichens stand-out. They come in a dazzling array of shapes, textures, and colors. They may be flat or bushy growth forms. You can find them growing on trees (living and dead) on other



Rock Tripe in the Blueridge Mountains

plants, and on the ground or on stones. The greens enliven the drab browns of winter and complement the velvety textures of darker green mosses.

A lichen is a distinct organism but one made up of two quite different organisms—an alga and a fungus. But when combined, lichens look completely different from either. Algae are plants and photosynthesize using sunlight to make food. Fungi are decomposers of organic matter, thereby providing critical nutrients and minerals. This mutualistic relationship is greater than the sum of its parts; each benefits from the other. This has allowed lichens to flourish in all of earth's terrestrial environments (lichens do not occur in aquatic habitats). It is estimated that around eight percent of the planet's land surface is covered with lichens, from the tundra to the desert and on any surface including man-made surfaces like asphalt, concrete, and plastics. Further, this relationship is so well balanced that a lichen can be



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viewed as a self-contained ecosystem acting as a host environment for a myriad of tiny invertebrates.

Many of you walk by lichens daily and never notice them. Rocks are absent in Dragon Run but head up to the mountains and you'll see the majority of exposed rocks are covered with colorful lichens. They play a vital role in the weathering of rock surfaces, gradually breaking down the rock, ever so slowly. Many rock lichens are very dark green, yellow, or even fiery orange yet they still have photosynthetic algae. The other color pigments are more abundant than the green chlorophyll pigments and act as a handy adaptation to shield them from sunburn and heat.

Lichens are abundant and easily seen if your observational switch is turned on. So, let's look around at a few remarkable lichens in our area.

One common and abundantly seen lichen along roadsides and open areas is *Cladonia*, also known as deer or reindeer moss. The white-green or grey-green pincushion-like clump (about fist size) is often seen, not singly, but in colonies or clumps growing directly on the ground. This bushy-shrubby growth form of lichens is referred to as **fruticose**. The common name is a misnomer because it is not a moss at all. The reindeer name is derived from a related species in the Artic tundra where it sustains reindeer, caribou, and moose during winter. The reindeer and other species scrape away the snow to get a nutritious meal that is high in





Clumps of reindeer lichen (Cladonia sp.) on the left and close-up of a single clump on the right



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carbohydrates and acid; it's okay for winter wildlife but too acidic for humans to eat unless boiled to get rid of the acidity.

Two abundant lichens we see on trees are **ruffled lichen** (*Parmotrema*) and **treeshield lichen** (*Flavoparmelia*), both of which exhibit a leafy form, referred to as **foliose**. Ruffled Lichen is gray-green and leafy. It grows in small to large patches (but not circles), mostly on branches (small and large) and sometimes on the tree trunk. The leafy ruffles rise from the surface of the tree. Greenshield lichen is also leafy but without ruffles and it nearly always grows in a circle with leaves rising only slightly above the surface of the bark. Although not known to be edible, this lichen, like many others, has been used widely in making dyes.



Ruffled lichen (Flavoparmotrema)



Green shield or tree shield

Another common lichen that is small, distinctive, ground dwelling, and easily recognizable is called **British soldiers** (also *Cladonia*). The British reference is for its colorful, red-topped fruiting bodies rising on hollow stalks supposedly like the red epaulets on British soldiers' uniforms. The stalks are less than an inch in height with the red fruiting bodies less than a quarter the size of an aspirin or smaller. Many species are referred to as British soldiers and may be seen with red, orange, or brown tops. They are an Alice-in-Wonderland world in miniature.



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British soldiers or Cladonia

One of my favorite understory trees is the evergreen American holly. It nearly always has an abundance of speckled blister lichen (*Viridothelium virens*) growing on its trunk. Blister lichen grows on other hardwoods, too. This lichen has very little green to it; it is mostly speckled yellow-orange with some green and lots of bumps (blisters). It forms a crust that tightly adheres to tree bark and is referred to as a **crustose** lichen. Even though it is common, I believe it is widely overlooked by most casual nature lovers. So, check the photo below and look for it on the next American holly you see.





Speckled blister lichen



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Another distinctive growth form of lichens is referred to as shrubby-bushy and called **fruticose**. The best example is bushy beard lichen or old man's beard (*Usnea* sp.). This lichen is frequently seen hanging from trees where it grows abundantly on branches in the canopy. As the common name suggests, it hangs like a beard (or tassel) in trees, mostly on branches but it can be on the trunk, too.

These lichens are leafless and rather stringy or hairlike with colors varying from yellow-green to greyish-green. You will often find it on the ground having fallen from a tree. Although some species in this group can hang down nearly ten feet, our local species hang less than a foot. I am often asked on walks and paddles if it is Spanish moss (*Tillandsia usneoides*). It is not. Spanish moss is a flowering plant, not a lichen or a moss.





Old man's beard

Here's one last amazing, little known fact about lichens. Lichens are a bioindicator of air quality. They have no roots, no protective surface, and they take the air directly into their tissue resulting in full exposure to air pollution. As a result, many species (but not all) are sensitive to air pollutants such as lead, sulfur, copper, and nitrogen. This makes some lichens (sadly) a useful indicator of air quality and widely used by environmental agencies (e.g. EPA, VA DEQ) to measure pollution levels. By surveying the species' composition and abundance, air pollution researchers can



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get a remarkably accurate indication of air quality. For example, old man's beard is sensitive to sulfur dioxide, so it is not found anywhere near coal burning power plants.

As I said, I think lichens are overlooked. But they are easily seen all year and they really stand out in winter. Get out and see if you can find a few of the lichens shown here. But, mainly, just get out in nature. Stop, look, and listen!



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#### **FODR Membership Update**

By Carol Kauffman, Membership Chair

As a FODR member you have an active role in preserving this pristine and fragile ecosystem. You protect ancient bald cypress trees, threatened species of birds and plants such as Prothonotary Warblers and feather foil, and hundreds of other species of flora and fauna. As a member, you are critical to FODR's success.

The number of FODR members has already increased during the first two months of 2024. As of February 4, there were 446 total members; 125 life members (a one-time contribution of \$1,000); and 121 auto-renewal members who enjoy the freedom of never forgetting to pay their dues. If you want to check the status of your membership, contact Carol Kauffman at <a href="mailto:vicepresidentdragonrun@gmail.com">vicepresidentdragonrun@gmail.com</a>.



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#### Standing Committees, Working Groups, and Appointees

Annaintage	Committees	Morling Crounc

Appointees	Committees	Working Groups
Paddle Masters	Outreach	Health of the Dragon
Carol Kauffman	Anne Ducey-Ortiz	Occasional meetings of leaders focused
Jim Ewan		on projects such as water testing, trash
	<b>Youth Outreach</b>	collection, invasive species mapping,
Safety Officer	Molly Broderson	and Dragon Keeper. This working group
Jack Kauffman		is our effort to track the health of the 40
	Stewardship	miles of Dragon Run.
Membership	Management	
Carol Kauffman	Jeff Wright	Dragon Community Science

# Occasional meetings of leaders of

ogistics_	Citizen Science	various citizen science, community
Davis Rhodes	Maeve Coker	science, bird box trails, support to
		agency and university projects, vernal
Trash Wrangler	Communications	pools, and species counts to advance
Mark Alling	Anno Atkins	projects and chare ideas and

projects and share ideas and

information.

Trash Wrangler	Communications
Mark Alling	Anne Atkins
Communications	Hunting

Andy Brown

Merchandise	Dragon Keeper
Jack Kauffman	Art Gilbert
	Andrea Mitman

Anne Atkins

Hike Masters

Tinc Masters	
Robin Mathews	Investment
Steve Mathews	Art Gilbert

Property	<b>Public Access</b>
Manager	Property
David Milby	Committee
-	(TKNP)
	Jeff Wright





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**Donations** 

Marsha Carlton

Webmaster

Carol Kauffman

**Administration** 

Jack Kauffman



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#### Join the Action; Become a FODR Volunteer

By Carol Kauffman, Vice President

To our delight, 2023 brought us many volunteers who have given their time to preserve and protect Dragon Run. Our 74 volunteers contributed hours maintaining trails, guiding paddles, leading hikes, picking up roadside trash, monitoring and building bird boxes, participating in bird and butterfly counts, and identifying species for citizen science.

There are many other ways volunteers can help out. We especially need volunteers to help with logistics on paddle days, as property monitors, and to handle merchandise sales. Want even more responsibility? We could use a coordinator for our merchandise, an assistant to handle mailings (email), and a grant application writer.

It's easy to volunteer! Contact Carol Kauffman at vicepresidentdragonrun@gmail.com.

#### You're Invited . . .

FODR members are invited to submit articles and photographs pertaining to Dragon Run. Share your knowledge about and your experiences on the Dragon. Written submissions should be three or four paragraphs. Images should be in JPG format. We look forward to having you as part of our communications team. Send your articles and photos to CommunicationsDragonRun.org.



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#### **Activities Calendar**

Check the FODR website for more information.

#### March 2024

- 1 Newsletter Publication
- 9 (Saturday) Spring Paddle Registration 9:00 am
- 14 (Thursday) Trash Pickup
- **16** (Saturday) Citizen Science Event
- 18 (Monday) Board of Directors Meeting
- 19 (Tuesday) Hike Preparations
- 24 (Sunday) Member Nature Walk
- 26 (Tuesday) Stewardship Volunteer Event

#### **April 2024**

- 6, 7 (Saturday & Sunday) Daffodil Festival
- 7-9 (Sun, Mon, Tue) Paddle Crew Training
- 11 (Thursday) Trash Pickup
- 13-30 Spring Paddle Season Days
- 15 (Monday) Board of Directors Meeting
- 20 (Saturday) Citizen Science Event
- **22** (Monday) Earth Day
- 28 (Sunday) General Membership Meeting Open to the Public

#### May 2024

- 1-22 Spring Paddle Season Days
- **18** (Saturday) Citizen Science Event
- 20 (Monday) Board of Directors Meeting
- 29 (Wednesday) Trash Pickup



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#### **Board of Directors for 2024**

#### **Executive Committee - One Year Terms**

Jeff Wright, President Carol Kauffman, Vice President Kevin Howe, Treasurer Adrienne Frank, Secretary

#### **Directors**

Anne Atkins
Andy Brown
Marsha Carlton
Maeve Coker
Anne Ducey-Ortiz
Jim Ewan
Gary Grabb
Andy Lacatell
Jack Kauffman
Steve Mathews
Dave Milby
Andrea Mitman
Harvey Morgan
Davis Rhodes